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Abrahamson, Hicks Meet with University Heads

Academic Boycott Rouses DoD's Star War Chiefs

The Pentagon has scoffed at the spreading academic boycott of the Strategic Defense Initiative, saying the opposition is overshadowed by 2700 applications for SDI awards from university researchers. But signs that it's worried were displayed last week when the Pentagon's R&D chief and the Director of SDI made a strong pitch for academic support before a group of university presidents, appealing to their patriotism and arguing that SDI is purely defensive and provides insurance against a Soviet "breakout" from the ABM Treaty.

The Defense officials received some sympathetic responses along with observations that the boycott and skepticism about SDI are strongest among the nation's leading research universities, while the applications come mainly from the more intellectually arid precincts of academe; that university presidents can't tell their professors what to research, and, finally, that Star Wars, along with big-ticket items in space and high-energy physics, are on the way to depleting resources for small-scale research.

The proceedings were cordial, and concluded in agreement that academe and the Pentagon should talk

Keyworth Urges Major Expansion Of NSF Engineering Program—Page 5

more about the missile-defense program. But they left the impression that SDI's managers are more concerned about academic opposition than their flip remarks of dismissal are intended to suggest.

The discussion took place October 7 in Washington at a meeting of the DoD-University Forum, a semi-annual bull session consisting of 12 university presidents and the Pentagon's top half-dozen R&D officials. Established in 1983 amid university concerns about the Reagan Administration's Jekyll and Hyde routines on science and secrecy, the Forum is valued by academe as an inlet to a hardline Pentagon through research managers who have shown awareness of academe's sensitivities. As one academic mandarin remarked to SGR last year, "The Forum is not much, but it's all we got."

The latest meeting involved 2 important new members of the Forum, Donald A. Hicks, the recently appointed Under Secretary of Defense for Research and Engineering, and the Director of SDI, Lt. Gen. James A. Abrahamson, who, though very busy in these early

days of the increasingly controversial program, spent 2 hours trying to win over the university contingent.

"It's a research program and a research program only," the uniformed and bemedaled Air Force General stated. "It is to be conducted within the confines of the ABM Treaty, and I assure you that there are a lot of checkers to insure that our program is conducted that way. First of all, that's been made very clear to me in my directions from the President."

SDI's support of fundamental science, administered through its Innovative Science and Technology program, Abrahamson continued, is "a search for the kind of basic research or new innovative ideas which will . . . move many important parts of technology forward, so that someday they could be incorporated into an SDI development program, but only after there has been a national decision to proceed with that development program."

(Continued on page 2)

In Brief

The House Science Policy Task Force hearings on science-government relations, underway in periodic sessions since spring, have been drawing good audiences—except from the Task Force itself, which numbers 18 House members. At recent meetings, on the National Bureau of Standards, the social sciences, and science support in the "mission" agencies, members kept coming and going, but rarely exceeded 3 or 4 at any one time; for long stretches, the Congressional presence consisted of a requisite single member. Even Science and Technology Committee Chairman Don Fuqua (D-Fla.), who created the Task Force and heads it, has a spotty attendance record.

Why? Overburdened schedules have made hopping and skipping a regular part of all committee life on Capitol Hill, but more than that, the marathon hearings are shaping up as droning overkill on a subject where there's little controversy, political glory or public notice. Press coverage has been virtually nil.

After a long search, Samuel O. Thier, of Yale, has been named President of the Institute of Medicine, health-policy arm of the National Academy of Sciences. He succeeds Frederic C. Robbins, President since 1980, who's returning to Case Western Reserve.

.. "Gurus Are Discouraging Brightest People"

(Continued from page 1)

Regarding basic research in universities, the General said, "Our ground rules are that it will be primarily unclassified. However, if somebody from the university community comes to us with an idea that they consider to be so significant or so sensitive that it ought to be classified, then, only in consultation with them would we review it for classification." In supporting universitybased fundamental science, Abrahamson said, SDI "is not aimed at bringing an institution, a total university. into the program. And certainly we are not looking for university support. We understand the importance of the principle of academic freedom. And we are not asking any university to endorse the idea of the Strategic Defense Initiative. Nor are we asking universities to change any of their research structures. We want to work within the existing system."

Research Linked to Mission

Continuing his pitch, Abrahamson said, "There is some stability within our program. Most of [the awards] are for 3 years. Some can be shorter, certainly some could be longer... When a university researcher submits a proposal that we consider to be valuable towards our particular mission, we then feel that we are just delighted to provide guarantees for that 3-year stability, within the limits that Congress will allow us."

"Nonetheless," he explained, "I have to point out that this program is funded for research against strategic missiles and shorter-range missiles. Therefore, one of the milestones that we use . . . is the proposals that we get do have to be related to our defensive mission. And we are not using this program as a means of trying to gain academic support or political support from the academic community."

When Abrahamson finished, Robert L. Sproull, former President of the University of Rochester, softly remarked, "The discussion so far doesn't quite mirror the problem that seems to be out in the world of the campuses I think it is a shame that the situation has gotten off on kind of the wrong track in the northeast and the west. I don't think we can take much com-

Forum's Academic-Pentagon Lineup

The DoD-University Forum is co-chaired by Donald Kennedy, President of Stanford University, and Donald A. Hicks, Under Secretary of Defense for Research and Engineering.

University members, all presidents unless otherwise indicated, are:

Edward J. Bloustein, Rutgers

Joseph M. Pettit, Georgia Tech

Robert L. Sproull, (President Emeritus) Rochester

Frank H.T. Rhodes, Cornell

Richard M. Cyert, Carnegie-Mellon

Steven C. Beering, Purdue

Marvin L. Goldberger, Caltech

C. Peter Magrath, U. of Missouri

Michael I. Sovern, Columbia

Henry Koffler, U. of Arizona

Percy A. Pierre, Prairie View A&M

From the Defense Department:

Lt. Gen. James Abrahamson, Director, SDI

Jay R. Sculley, Assistant Secretary of the Army for R&D and Acquisition

Thomas E. Cooper, Assistant Secretary of the Air Force for Research Development and Logistics

Colonel Donald I. Carter, USAF, Acting Deputy Under Secretary of Defense for Research and Advanced Technology

Melvyn R. Paisley, Assistant Secretary of the Navy for Research, Engineering and Systems

Leo Young, Director, DoD Research and Laboratory Management

fort from the 2700 [applications] and the fact that people are hungry and will send in proposals. This is probably the hardest technical job of the century, and it's going to be a long haul, and it's going to have to get not just the best people in the south and southwest, or the best people in the national labs, but the best people everywhere.

"But unfortunately," Sproull continued, "the gurus in my part of the world are discouraging a lot of the brightest young people from working on SDI. It's quite (Continued on page 3)

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... Hicks Assails Academic Opponents of Defense

(Continued from page 2)

different from the situation with the early days of ballistic missiles, where Jason [a high-level DoD study group drawn mainly from universities] and other units . . . got young people invited aboard. I think we've got a lot of work ahead of us to try to raise the level of discourse on universities above the bumper-sticker level, which is about where it is at my university and lots of others."

Under Secretary Hicks, who came to DoD from the Northrop Corporation, chimed in with a reminiscence: "I can remember a time 20 years ago when I heard a professor of physics that you know personally say that he was very pleased to get Defense Department money, loved it, found it was absolutely unfettered, undirected, and in the meantime was telling his graduate students not to go to work for defense industry. It seems to me to be the kind of attitude that is so extreme that I don't know how you discourse with that part of the university environment. But everybody has a right to their views I would really love to see people in this room, who are really the leaders of the university community, come to some understanding about SDI I'd like to try to keep the ideological issues out of it, as much as possible. I realize that's difficult to do," Hicks conceded.

Must Observe ABM Treaty

Turning then to the issue of whether SDI might violate the ABM Treaty, Hicks explained, "I have the statutory responsibility to make sure we don't violate the ABM Treaty." The Under Secretary then told the Forum, "To me, the goal of all this is to come up with deterrence. It's amazing how many people don't think about deterrence, but deterrence means you have to be able to fight a war. If we don't have a viable and realistic capability of fighting and winning, or at least making the results so painful for the enemy that he doesn't want to start it, then you don't have deterrence."

Hicks then turned to history: "In 1945 and '6 and '7, when we controlled the ability to control this world," he said, "we had it in our hand, if we wanted to do that. As a people, we didn't want to do that. We didn't have any desire to take advantage of the fact that we were the only people with nuclear weapons and dominate the world. And yet, so much of our community still seems to feel as if we do.

"I can remember another case," Hicks said, "of a very well-known analyst, respected until that moment by me, who was on the National Security Council in the last Administration, saying that he trusted the Soviet Union more than the United States in terms of starting a war. So, with that attitude, I don't know how to discourse."

Referring to the attitude of the unnamed analyst, Hicks turned to a canine example: "That's sort of like saying that you have a Doberman and you think of him as your child, and one day you realize he's not. You may have thought of him as a human being, but he's still a Doberman. And when you get to that point, you decide you just can't discourse with him.

"But, we need to have the support of the university community." he continued. "This is where all the creative things, in general, come out. Industry, where I came from, worked very closely with universities . . . the same way that DoD does, because we recognized the tremendous value of the technical capabilities there. And we tried as best as we could to help the universities in every way we could. We spent a lot of money in terms of shareholders' profits on things like that We must communicate more on SDI with universities

"I Don't Fear the US"

"We have groups saying that they're not going to work on issues of algorithms, because you're never going to get there from here and if you did, it would help SDI," Hicks said. "I don't have any fear about the United States . . . I personally want and desire the understanding and support of this group for SDI. Nobody is trying to pretend that it's the ultimate solution . . . But there's a tremendous number of important technical things that are going to come out of this program. And I have another interesting question to ask Why is the Soviet Union so upset about it?" Hicks asked. "You see the incredible unhappiness, upfront huge PR, they've got the KGB disinformation group working time and a half. Why is that?"

For a moment, it appeared that an answer might be offered by Henry Koffler, President of the University of Arizona, who raised his hand. But Koffler merely wanted to know about SDI's procedures for evaluating research applications. James Ionson, chief of SDI's Office of Innovative Science and Technology, explained that his program relied on contracting officers attached to the military services, and they employed peer review or inhouse review, according to their customary ways of doing business.

Stanford President Donald Kennedy, who co-chairs the Forum, sat silently and poker-faced throughout Abrahamson's hardsell and Hicks' meandering soliloquy. When Koffler's inquiry had been answered, Kennedy spoke:

"I thought it might be well, though not really necessary," he said, "to remind everybody that universities are odd creatures, that they're very distributed, they're (Continued on page 4)

. . . A Lecture on Academic Ways by Donald Kennedy

(Continued on page 3)

very loosely federal, very entrepreneurial; that principal investigators as faculty members have lots of capacity to do or not do what they choose. And that they are encouraged in all sorts of ways to make those choices and to make them on the basis, first of all, of convictions not only about what they ought to be working on in some ultimate sense of their own standards and values, but also how they ought to be distributing their own talents so as to make the highest and best use of them.

"I think that there's going to continue to be a lot of untrammeled expression on the part of individual scientists, individually and in groups, on this issue," Kennedy continued, "and that it's important to be careful to understand that for what it is, which is, the views of people who are making individual decisions about what and how they work. That is not the same, although sometimes it may by accident be the same, as institutional policy. I think most universities leave those decisions to investigators, because, historically it's been shown, that's absolutely the best way to get them working most effectively and to advance the institution most effectively.

Kennedy continued: "Our policy as universities is to leave those decisions in the hands of investigators, which means, among other things, we don't say, 'Don't do this kind of work, because we don't think it's in your best interest to do so.' We do not take institutional positions against particular kinds of work because of ultimate end use or because of source of funds. We only do it on the basis of certain provisions regarding the conduct of the research. To some of us, openness and access are very important. There are others, but those are especially significant," Kennedy concluded.

SDI Seeks "the Best Brains"

Hicks responded, "I agree with that position. That's what make universities great. That hasn't always been the position of presidents of some universities, who have used their position as a forum for saying specific things Nobody's asking," Hicks continued, "that anybody do anything but what's for the value of our country At the same time, the Department has a mission and we have an organization and we'd like to try to get the best brains to understand our position and work with us. If they don't feel comfortable with it, they shouldn't. They also shouldn't expect funds if they don't feel comfortable with it It's a free country. People should do what they judge best for them. But when you have a Department of a government that's dedicated to defending the nation, then that has to be the way that their funds go "

Joseph M. Pettit, President of Georgia Tech, expressed curiosity about whether SDI funds were confined to research projects likely to confirm the feasibility of missile defense. General Abrahamson assured him that "there are many projects aimed at what the other side could do to try to overcome such a system. Those are, of necessity, very highly classified," the General said, "not because we're worried about it politically, but because if we come up with, in a certain sense, an Achilles' heel, we want to know that first, and be able to direct our research properly."

Abrahamson explained that SDI was performing laser research, but it's "defensive research," he said. "We're not doing anything on what can you do with this thing to try to destroy a city. Let me say as a military man, the dumbest way to try to destroy a city is to take a laser and march down 2d Street and then back up 3d Street. But we do have people who are working on pervasive phenomenology, because obviously that's the way one proceeds with weapons develoment. We have people at the very same time trying to develop laser armor. Are there means to counter this kind of application? Because if we can invent it, probably some day the Soviets can."

"A Terrible Information Gap"

The General went on to say that relations between SDI and the university community suffered from "a terrible information gap, and it's really rather distressing to me, because it's from distrust of the leadership, because the President has made statements very clearly that it's only a research program; I've made [similar] statements in sworn testimony to Congress. I think the problem is that the critics of the program are quite fast and loose with some of their interpretations of what we're doing."

Hicks took over at that point. SDI provided insurance, he said, "against the Russians breaking out of the ABM treaty." He added that "they haven't been very worried about violating the Helsinki Treaty, for example, so their history of worrying about treaties is not terrific. But I guess the main issue here is that we should have the technical arsenal available to us in research so that we at least have the ability to know what to do or might discover what they already know."

"If the Soviets break out of the ABM treaty," he said, "we certainly should be in a position to know what their capabilities are and what we can do about it."

Dale Corson, former President of Cornell University, present as a non-member of the forum, then expressed (Continued on page 5)

Keyworth Urges Boost for NSF Engineering Program

The following ebullience regarding NSF's fledgling program of university-based Engineering Research Centers (SGR Vol. XIV, No. 18), plus other matters, is excerpted from a talk on September 26 by Presidential Science Adviser George A. Keyworth II. The words are from a tape, transcribed and edited by SGR. The occasion was a conference in Washington on "Industrial Competitiveness: Technology Transfer and Tax Reform," sponsored by the American Enterprise Institute and the US Department of Commerce.

You may think I'm making a big deal about what's just another agency program. But I want to emphasize that these centers are probably the single most important initiative in the Reagan Administration's science policy. This is not a program. I believe that this is an incipient revolution. What impresses me most is that these 6 centers are like beneficial viruses. And each is infecting the campuses and industries involved with a new perspective on how to pursue technology.

They are the visible manifestation of an emerging new culture on those campuses, one that is problem-focused, rather than discipline-focused. And one that recognizes the legitimacy of industrial research perspectives. It's a heck of a change, one whose impacts can't help but be far-reaching I cannot think of a more responsible, higher-leverage way for the federal government to address our economic future than to make possible the concentration of effort within universities on areas of basic research with high potential payoff for industry.

By doing this, we assert and lay the grounds for locking into place unquestioned leadership in science and technology, but we do it without perpetuating the kind of science-for-science-sake federal funding that created

2d Round to Pick New Centers

The National Science Foundation is sorting through 104 applications for the second round of awards in its program of Engineering Research Centers. The winners, 3 to 6 of them, depending on Congressional treatment of the NSF budget, will be announced in April.

The money sought in the applications adds up to \$1.4 billion, but despite the academic thirst and the Administration's lavish praise for the program, the actual sums paid out and promised so far are minuscule: about \$20 million a year spread among 6 schools or combinations of institutions, with the support guaranteed for at least 5 years.

The program, designed to promote academic-industrial collaboration on basic engineering research, got underway last year with awards to UC Santa Barbara, Columbia, the University of Delaware (in collaboration with Rutgers), the University of Maryland (with Harvard), MIT, and Purdue. In that opening round, 142 schools applied, asking for sums that totaled over \$2 billion.

the isolation of the university in recent years. No, we do this because our economic future depends on it.

We have to remember that this is not the government stepping in and messing around with something industry can and should be doing on its own. Industry is very good at developing products, but not very good at developing new fundamental knowledge

There are an incredible number of opportunities where we have the intellectual lead now, where we see (Continued on page 6)

SDI

(Continued from page 4

concern about SDI's effects on "the long-range health of the country," noting that "we're getting a lot of funds invested in what now are coming to be called megaprojects, of which SDI is the biggest." Also citing the space station and the Superconducting Super Collider, Corson said, "There just isn't enough money going around to sustain the health of the research enterprise. And it seems that it's inevitable that there will be a decline in the kind of science that's been with us for the last 40 years, the investigator-initiated research projects, in which the ideas are coming from the scientists themselves. What the long-term implications of that is, I don't know," Corson said, "but I believe that this is part of the debate and should be talked about in the discourse with the university community."

Hicks responded, "There is no doubt that there's a lot

of mis-communication." He suggested that "this forum or a special forum should have a special meeting on this matter, that the General and you ought to talk about the basic programs." Hicks then hesitated, noting that Abrahamson "is sort of overwhelmned with the call on his time," and he then suggested to Abrahamson that "we might get a videotape put together" for distribution to universities.

Telling the university presidents around the table that "we have tremendous respect for your abilities as administrators, for your background," Hicks said, "We don't ask you to support anything that you don't believe. But we certainly owe it to you and to ourselves to get the proper story as we see it in front of us."

The SDI portion of the agenda was concluded with an agreement to look into holding further discussions on the subject.—DSG

... Recommends Another \$500 Million for New Centers

(Continued from page 5)

the way that lead could be accelerated, and where we could lay odds that industrial technologies somewhere are going to flow from it

Earlier this year, a group of scientists came to talk to me about computer vision. There's a field of enormous potential, spanning the range from robotics to smart munitions and beyond. Yet, the way our best people are doing this work now, in universities, falls, in my opin-

ion, far, far short of its potential.

Almost everything about their efforts lacks the vitality that ought to be spurred by the intellectual challenge or the industrial competition. As a result of the way we're working on it, it may take these isolated groups a generation to achieve the breakthroughs that I'm convinced could be accomplished in just a few years. I think that's crazy. In a field with so much potential, shouldn't we be encouraging and helping them to move faster, to develop more knowledge and to train more people in this exciting and promising area?

For those of you who think science and technology can't be rushed, that doubling and tripling the effort only results in waste, I would urge you to look at what's been happening, in fact—not in the newspapers—in the Strategic Defense Initiative. Because we put the highest national priority on getting results, and because we brought excited, excellent researchers together and told them to get on with it, since 1983, we have already seen breakthroughs, for example, in laser technology that we expected to be more than a decade away. And, what was a question of "if" in 1983 is today a question of "how," and we've come that far.

The lesson is so clear that we can't ignore it: We have the capability, because of our science and technology expertise, to work wonders—if only we decide we want to and decide to assign the kind of priority that produces results. And I'm willing to argue that our leadership in industrial technology demands that kind of priority. Mere reverence for free trade is not enough. We need a culture that settles for nothing less than winning. And I don't think we're very far away from being able to set in motion a really powerful new spirit in the academic world

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Those 6 Engineering Research Institutes—6 in place with another 140 [applicants for NSF support] that were equally ready to embrace change—show us that the culture in universities is changing. They're blazing the way for remarkably more open interactions between academia and industry. They're going to demonstrate in no uncertain terms the power of multidisciplinary research, and they're going to show us how to train a new generation of researchers who won't be constrained by the disciplinary or institutional biases of yesterday.

And what evidence for a change in national culture is more fundamental than a change in academic attitudes? Not only because this is the source of tomorrow's talent, but because, I would argue, universities are often the last sector of our society to respond to change.

This idea of science and technology centers is the best model I've seen in a long, long time to build on Why not take the top 20 or 30 and encourage universities to establish similar kinds of campus research institutes to focus on them. Let's decide now that America is going to dominate technology in the 21st century, and let's start now by investing in the people who will be able to do that. One relatively small agency started the ball rolling. What NSF has learned ought to be applied by half a dozen other agencies in stimulating similar science and technology institutes across the spectrum of research.

I'll even suggest the framework. Let's decide to add \$500 million to our basic research funding and devote it entirely to starting up those centers—say, at about \$10 million per year per center. If you wonder about what kind of impact that would have, I suggest you visit one of those campuses where the engineering research centers are now underway. There's a palpable change in attitude there, an enlarging perspective about the role of US technology and how it can be mobilized. And then imagine similar elevations of priority for technological leadership on 50 university campuses.

For those who may be concerned about the potential of this effort for distorting the quality of universities, let's remember the degree to which universities themselves have learned to maintain their integrity over the years. They're not going to undertake anything that isn't, as I said, going to stretch their intellectual horizons.

Question [from the audience]: Was the proposal [for \$500 million for additional engineering research centers] cleared with the Office of Management and Budget?

Keyworth. I don't believe in that. Never entered my mind.

New Academic Security Rules Come with Big Loophole

Newly issued Presidential ground rules on secrecy in government-supported research in universities provide some protection against the depredations of the Pentagon's increasingly brazen security goons. But the new rules, embodied in a National Security Decision Directive (NSDD), include a capacious loophole that wasn't in the draft that was warmly greeted last year by anxious academic officials:

It says that "to the maximum extent possible, the products of fundamental research [should] remain unrestricted." Furthermore, a covering letter from National Security Adviser Robert C. McFarlane states that "In implementing this directive, it is important to remember that this NSDD preserves the ability of the [government's] agencies to control unclassified information using legislated authority provided expressly for that purpose in applicable statutes."

The net effect is that if the Defense Department wants to put on a tough act against academe, the rules won't get in the way, especially since the old and new versions of the official policy statement also require compliance with unspecified "applicable US statutes." Many of these statutes have accumulated over the postwar years, and for the nimble legal mind, they offer anything that's sought on the intricacies of information control.

Titled "National Policy on the Transfer of Scientific, Technical and Engineering Information," the Directive was issued September 26 over the President's signature. It is descended from a draft statement released in June 1984 by the wing of the Pentagon that sought to resist security impositions on academic research. Headed by the DoD Under Secretary for Research and Engineering, Richard D. DeLauer—who resigned last December—this group stood in opposition to the policy side of the Pentagon, headed by Under Secretary Fred C. Ikle and his foaming ideological colleague, Assistant Secretary Richard N. Perle. Allied with DeLauer was the White House Science Office, which collaborated on the draft statement.

DeLauer and company appeared to triumph when the Department of Defense adopted his recommendation for categorizing research only as classified or unclassified. The effect was to disavow the "gray-area" or "unclassified but sensitive" concept under which Defense security agents had invaded professional meetings and yanked research papers. Officials of the big research universities and professional societies had sought that 2-part simplification in security labeling, arguing that they knew how to deal with classified or unclassified, but not with the inbetween concept.

Following adoption by DoD, the DeLauer draft was

sent to the National Security Council in mid-1984 in the expectation that it would be reviewed and then issued as national policy within a few months. Instead, it remained out of public sight for 18 months while the Perle camp fought for language changes. At the beginning of September, Perle's man for looking after these matters, Stephen Bryen, told SGR that the draft would not emerge without significant changes.

The private response among university officials concerned with the security issue is that, given the natural tendencies of the Reagan Administration, the Presidential directive is all that could be hoped for. However, the view from the civil liberties camp is quite negative, since almost anything can be accommodated under the terms of "maximum extent possible" and "applicable US statutes."

Policy Statement on Security

When it wants to, the White House floods Washington with official documents, but it is being sticky with copies of its new "National Policy on the Transfer of Scientific, Technical and Engineering Information." The official source, the National Security Council, says requests for copies must be submitted in writing, and warns that the backlog, as of last week, totaled 600. Following is the complete text of the newly issued "Policy" statement, which introduces the loophole clause "to the maximum extent possible."

Policy. It is the policy of this Administration that, to the maximum extent possible, the products of fundamental research remain unrestricted. It is also the policy of this Administration that, where the national security requires control, the mechanism for control of information generated during federally funded fundamental research in science, technology and engineering at colleges, universities and laboratories is classification. Each federal government agency is responsible for: a) determining whether classification is appropriate prior to the award of a research grant, contract, or cooperative agreement and, if so, controlling the research results through standard classification procedures; b) periodically reviewing all research grants, contracts, or cooperative agreements for potential classification. No restrictions may be placed upon the conduct or reporting of federally funded fundamental research that has not received national security classification, except as provided in applicable US statutes.

Wave of Staff Shifts at White House Science Office

The science-policy rumor mill has been clucking about a surge in staff turnover at the White House Office of Science and Technology Policy (OSTP) in recent months. But, despite the notably free-form administrative style of Director George A. Keyworth and his unrestrained cheerleading for Star Wars, the traffic is routine and does not reflect any grand discontent.

The most recent departure was that of Bernadine Healy, Deputy Director for Life Sciences, who has gone to the Cleveland Clinic as Vice President for Research and Development. Healy, a physician who came to OSTP from Johns Hopkins, was married in August to a surgeon at the Clinic. Keyworth has not named a successor, acting or full-fledged, for Healy, who was appointed to the OSTP job in June 1984 to remedy a long-running neglect of biomedical affairs. Physicist Keyworth, knowing little about that subject, entrusted Healy with his mission of enlisting NIH in the cause of industrial competitiveness. The matter remains earnestly under study in Bethesda.

Other recent departures include military officers who have rotated in and out of OSTP, including Air Force Lt. Col. Mike Havey, who looked after SDI affairs for Keyworth, and Navy Capt. Mario Fiori, who served as Keyworth's military assistant.

Ralph DeVries, OSTP Assistant Director for General Science, left to return to the Los Alamos National Laboratory; Tom Price, a former OMB staff member who handled energy for OSTP, left for a non-government job, as did Andrew Pettifor, a former NSF staff member, who worked on general science matters. Mike Schwartz, a general policy analyst, went to OECD.

On the incoming side, recent appointees include Navy Capt. Pete Graef, who serves as Keyworth's military assistant, plus Air Force Colonels Joseph Bailey and Robert McMains, who work on SDI, along with Sidney Singer, who came from Los Alamos. Robert Rabin has been assigned from NSF and Marvin Cassman from NIH, both to work on the life sciences. Another arrival is Lee Rivers, who came from the Allied Corporation to work at OSTP as a fellow of the Industrial Research Institute.

NAS-Soviet Talks Still Stalled

The negotiating process remains alive, but there's been no progress toward a resumption of scientific relations between the National Academy of Sciences (NAS) and its Soviet counterpart.

The latest discussions took place in August, when an NAS staff member visited Moscow. NAS hasn't announced the outcome of those talks, but it's understood that the 2 academies still remain far apart on the issues of Andrei Sakharov's plight and insistence by NAS that American scientists have a realistic opportunity to invite Soviet specialists to the US. The latter point has been consistently troublesome in Soviet-American scientific relations, since the Soviets generally keep their superstars at home and send scientific hacks.

A general protocol on renewed scientific exchanges was signed by the 2 academies in January. Since then, NAS has been criticized by some of its members for negotiating with the Soviets while they continue to abuse Sakharov (SGR Vol. XV, No. 9).

The link between Soviet treatment of Sakharov and the future of US-USSR scientific ties was referred to in a statement issued in September by the NAS Committee on Human Rights and approved by the Governing Council of the Academy. "On humanitarian grounds, in the interest of relations between our 2 countries, and to foster scientific cooperation," the statement appealed to the Soviet government to stop persecuting Sakharov.

Meanwhile, reports have been circulating that during his visit to Paris, Mikhail Gorbachev indicated that the Sakharovs, and perhaps other scientific dissidents, may be permitted to leave the Soviet Union. That move would instantly defang a great deal of opposition to a rejuvenation of Soviet-American scientific relations.

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